



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,259	07/18/2003	Steven Michael Hausman	2002P20760US01	3269

7590 04/19/2007  
Siemens Corporation  
Intellectual Property Department  
170 Wood Avenue South  
Iselin, NJ 08830

EXAMINER
----------

HASSAN, AURANGZEB

ART UNIT	PAPER NUMBER
----------	--------------

2182

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/622,259

Applicant(s)

HAUSMAN ET AL.

Examiner

Aurangzeb Hassan

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/8/2006</u>  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/24/2007 has been entered.

***Priority***

2. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows: The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original non-provisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 09/507,479, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. The prior-filed application, now US Patent 6,625,665, does not provide adequate support or enablement for the

Art Unit: 2182

claim limitations of a Freeport mode or a PPI mode, therefore not enabling the claim limitations of the current application.

This application repeats a substantial portion of prior Application No. 09/507,479, filed 2/17/2000, and adds and claims additional disclosure not presented in the prior application. Since this application names an inventor or inventors named in the prior application, it may constitute a continuation-in-part of the prior application. Should applicant desire to obtain the benefit of the filing date of the prior application, attention is directed to 35 U.S.C. 120 and 37 CFR 1.78.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

### **Examiner has provided a summary in order to better follow the rejection.**

**Claims 1 – 9, 11, 12, 14 – 22 and 26 – 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al (US Patent Number 5,649,001 hereinafter "Thomas") in view of Boggs et al (US Publication Number 2001/0037491 hereinafter "Boggs").

**Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Cisco Systems.

**Claims 13 and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Rostoker et al. (US Patent Number 6,978,319)

**Claims 23 – 25 and 30 – 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Al-Ali (US Publication Number 2003/0167391).

Art Unit: 2182

(*Emphasis has been added* to claim limitations that recite terminology that require the ability to carry out a certain function, however the claim limitations do not necessitate that the function be completed, *i.e.* the terms **couplable** and **connectable** do not necessitate a coupling or connection but merely recite the ability to be coupled or connected.)

4. Claims 1 – 9, 11, 12, 14 – 22 and 26 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al (US Patent Number 5,649,001 hereinafter “Thomas”) in view of Boggs et al (US Publication Number 2001/0037491 hereinafter “Boggs”).

5. As per claim 1, Thomas teaches a system comprising: a cellular telephone modem (cellular phone system, column 3, lines 8 – 15); and a programmable cable (communication adapter cable, element 22, figure 1) comprising a first end **connectable** to a computer (communication interface device, element 20, figure 1) and a second end **connectable** to said cellular telephone modem (communication network/device, element 28, figure 1, cellular phone system, column 3, lines 8 – 15); said programmable cable adapted to store at least one of a plurality of configuration parameters comprising a PIN number (identification code, column 6, lines 15 – 20); said programmable cable adapted to, in an operative embodiment, automatically configure said cellular telephone modem by communicating at least one of the configuration parameters to said cellular telephone modem (column 6, lines 15 – 25 and lines 38 – 46).

Thomas fails to specify the type of computer as being a PLC and a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (PLC attached to cable, paragraph [0331]) **connectable** to a programmable logic controller (PLC) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to one of ordinary skill in the art to combine the above teachings with Boggs. One of ordinary skill in the art would be motivated to make such modifications in order to provide higher performance in communications (paragraph [0027]).

The examiner notes that the applicant in the specification background, paragraph 2, lines 1 and 2, states that a PLC is a type of **computer** (emphasis added) utilized in control systems.

6. As per claim 2, Thomas teaches a device comprising: a programmable cable (communication adapter cable, element 22, figure 1) comprising a first end **connectable** to a PLC (communication interface device, element 20, figure 1) and a second end **connectable** to a network communications device (communication network/device, element 28, figure 1), the network communications device further **couplable** to a user interface device (cellular phone system, column 3, lines 8 – 15); said programmable cable adapted to store at least one of a plurality of configuration parameters; in an operative embodiment, said programmable cable adapted to

automatically configure the network communications device by communicating at least one of a plurality of configuration parameters to the network communications device comprising a PIN number (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (PLC attached to cable, paragraph [0331]) **connectable** to a programmable logic controller (PLC) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

7. As per claims 9, Thomas teaches a device comprising: a programmable cable comprising, a first end **connectable** to a network (**couplable** to a PLC), and a second end **connectable** to a network communications device (communication network/device, element 28, figure 1); the network communications device further **couplable** to a user interface device (cellular phone system, column 3, lines 8 – 15); and said programmable cable programmable to store at least one of a plurality of configuration parameters comprising: a communication language (adapt the modem to a particular country's telephone network, column 1, lines 63 – 67, column 3, lines 1 – 2) and an identifying

PIN number (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59, emphasis added).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (cable, paragraph [0331]) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

The Examiner asserts that the claim limitations only require the capability to communicate to the PLC but do not necessitate such limitations. Accordingly the programmable cable of Thomas communicates with a computer and network.

8. As per claim 14, Thomas teaches a method comprising the activities of: providing a programmable cable comprising a first end and a second end, the first end **connectable** to a PLC (communication interface device, element 20, figure 1), the second end **connectable** to a cellular telephone modem (communication network/device, element 28, figure 1), a user interface device **coupable** to a network comprising the programmable cable, the PLC, and the cellular telephone modem (cellular phone system, column 3, lines 8 – 15); said programmable cable adapted to store at least one of a plurality of configuration parameters (communication adapter



cable identification code stored on communication adapter cable, column 10, lines 47 – 59); and automatically configuring the cellular telephone modem by the programmable cable (handshaking and connectivity via communication interface device upon automatic verification of the identification code, column 6, lines 15 – 48).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (cable, paragraph [0331]) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

9. As per claim 26, Thomas teaches a method comprising the activities of: providing a programmable cable comprising a first end **connectable** to a network (communication interface device, element 20, figure 1) and a second end **connectable** to a network communications device (communication network/device, element 28, figure 1), a user interface device **couplable** to a network (cellular phone system, column 3, lines 8 – 15); and automatically communicating from the programmable cable to the network communicating device a PIN number and at least one of a plurality of configuration parameters (handshaking and connectivity via communication interface device upon automatic verification of the identification code, column 6, lines 15 – 48, communication

adapter cable identification code stored on communication adapter cable in use for cellular telephone network, column 10, lines 47 – 59).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (cable, paragraph [0331]) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

The Examiner elaborates that Thomas teaches a programmable cable **couplable** to a network. Thomas teaches a general network and as the claim limitations stand in claim 26, the term **couplable** does not necessitate all the proceeding elements but rather puts forth a capability to be coupled to such a network. As claim 26 is a method the claim limitation **couplable** does not necessitate the particular network comprising particular network elements but rather necessitates the capability of coupling to a network in general which is Thomas' cellular phone system.

10. Thomas modified by the teachings of Boggs as applied in claim 2 above as per claims 3, 4, 6 – 8, Thomas teaches a device wherein the network interface device comprises a multitude of end interfaces (cellular phone system: column 3, lines 8 – 15;

Art Unit: 2182

telephone network: column 1, lines 65 – 67, column 2 lines 1 – 2; network and Internet: column 8, lines 42 – 59; cellular phone system: column 3, lines 8 – 15).

11. Thomas modified by the teachings of Boggs as applied in claim 2 above as per claim 5, Thomas teaches a device wherein the configuration parameters further comprise a setup string for the network interface device (column 8, lines 45 – 58).

12. As per claim 11, Thomas teaches a device wherein in an operative embodiment, said programmable cable adapted to automatically configure the network communications device by communicating at least one of the plurality of configuration parameters to the network communications device (column 8, lines 45 – 58).

13. As per claim 12, Thomas teaches a device wherein said second end of said programmable cable comprises an RS232 network connector (communication over an RS232 serial port, column 1, lines 31 – 37).

14. Thomas modified by the teachings of Boggs as applied in claim 14 above as per claims 15 and 16, Thomas teaches a method wherein said automatically configuring activity occurs during/after a power-cycling of the programmable cable (power-cycling through connection and interchanging of adapter cables and automatically configuring through periodic polling, column 4, lines 17 – 63).

15. Thomas modified by the teachings of Boggs as applied in claim 14 above as per claim 17, Thomas teaches a method comprising automatically communicating, from the programmable cable to the network communications device at least one of the plurality of configuration parameters (column 8, lines 42 – 59).

16. As per claims 18 and 27, Thomas teaches a method comprising: via the user interface device through the network, setting at least one of the plurality of programmable cable configuration parameters comprising a communication language (adapt the modem to a particular country's telephone network, column 1, lines 63 – 67, column 3, lines 1 – 2) and an identifying PIN number (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59).

Boggs teaches said programmable cable programmable to store **at least one** of a plurality of configuration parameters comprising: a mode of operation, a PPI protocol, and a data transfer speed (PPI, mode, and baud rates, paragraph [0251]).

*(Emphasis added)*

17. Thomas modified by the teachings of Boggs as applied in claim 14 above as per claims 19 – 21, Thomas teaches a method further comprising initializing the programmable cable using the user interface device through the network by setting at least one of the plurality of configuration parameters comprising a network communications device setup string and a PIN number (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59).

18. Thomas modified by the teachings of Boggs as applied in claim 14 above as per claim 22, Thomas teaches a method wherein said activity of automatically configuring the cellular telephone modem by the programmable cable further comprises communicating at least one of a plurality of configuration parameters, comprising cellular telephone modem setup string and a PIN number, to the cellular telephone modem (handshaking and connectivity via communication interface device upon automatic verification of the identification code, column 6, lines 15 – 48, communication adapter cable identification code stored on communication adapter cable in use for cellular telephone network, column 10, lines 47 – 59).

19. As per claim 28, Thomas teaches a method wherein the configuration parameters communicated to the network communications device further comprise a network communications device setup string (column 8, lines 45 – 58).

**20. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Cisco Systems.**

21. Thomas modified by the teachings of Boggs and Cisco as applied to claim 9 above, as per claim 10, Thomas teaches a device comprising: a programmable cable comprising, a first end **connectable** to a network (**couplable** to a PLC), and a second

end **connectable** to a network communications device (communication network/device, element 28, figure 1, emphasis added)

Thomas in view of Boggs does not explicitly teach token holding.

Cisco teaches a device wherein said programmable cable further adapted to, in an operative configuration, serve as a token holding master on the network adapted to multiplex networked communications with the PLC (each station holding token, Section: Token Ring Operation).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Thomas and Boggs with the above teachings of Cisco Systems. One of ordinary skill in the art would have been motivated to make such modification in order to allow reduce collisions of data on network (Section: Review Questions).

**22. Claims 13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Rostoker et al. (US Patent Number 6,978,319).**

23. As per claim 13, Thomas teaches a device wherein said second end of said programmable cable comprises a connector (can be utilized with wide variety of communication protocols and a variety of networks, column 3, lines 47 – 54).

Thomas fails to teach a connector that which comprises a USB network connector.

Rostoker et al. analogously teaches a device wherein said second end of said programmable cable comprises a connector comprising a USB network connector (column 5, lines 4 – 11).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Thomas and Boggs with the above teachings of Rostoker et al. One of ordinary skill in the art would have been motivated to make such modification in order to allow for "plug-and-play" further allowing transparency on the user end (column 2, lines 63 – 67).

24. Thomas modified by Boggs further modified by the teachings of Rostoker et al. as applied to claim 13 above, as per claim 29, Rostoker et al. teaches a method further comprising monitoring data traffic through the programmable cable using a set of status indicators (status of data present through protocols where the controller notes indication, figure 8).

**25. Claims 23 – 25 and 30 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Al-Ali (US Publication Number 2003/0167391).**

26. As per claims 23 – 25 and 30 – 32, the combination of Thomas and Boggs teaches a method further comprising communications between the user interface device and the PLC (Thomas: computer, column 3, lines 47 – 54; Boggs: PLC paragraph

[0331]), between the programmable cable and the PLC and between the programmable cable and the user interface device (Thomas: figure 1).

The combination of Thomas and Boggs fails to explicitly teach the limitation of encryption along the communication lines lying therein between.

Al-Ali teaches analogously a method comprising encryption along a cable communicating between interfaces (encryption interface cable, element 700, figure 6).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Thomas and Boggs with the above teachings of Al-Ali. One of ordinary skill in the art would have been motivated to make such modification in order to allow for exclusive compatibility between interfaces without the necessity of hardware modifications (paragraph [0027]).

### ***Examiner's Note***

27. Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention

### ***Response to Arguments***



Art Unit: 2182

28. Applicant's arguments with respect to claims 1 – 32 have been considered but are moot in view of the new ground(s) of rejection.

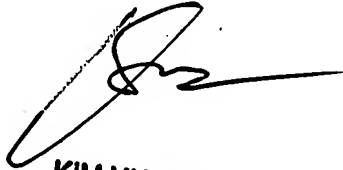
**Conclusion**

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aurangzeb Hassan whose telephone number is (571) 272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH

  
KIM HUYNH  
SUPERVISORY PATENT EXAMINER  
4/16/7